



General

Guideline Title

Assessment and management of pressure injuries for the interprofessional team, third edition.

Bibliographic Source(s)

Registered Nurses' Association of Ontario (RNAO). Assessment and management of pressure injuries for the interprofessional team. Third edition. Toronto (ON): Registered Nurses' Association of Ontario (RNAO); 2016 May. 160 p.

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Registered Nurses' Association of Ontario (RNAO). Assessment & management of stage I to IV pressure ulcers. Toronto (ON): Registered Nurses' Association of Ontario (RNAO); 2007 Mar. 112 p. [118 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Definitions for the levels of evidence (Ia, Ib, IIa, IIb, III, IV, V) are provided at the end of the "Major Recommendations" field.

Practice Recommendations

Assessment

Recommendation 1.1

Conduct a health history, a psychosocial history, and a physical exam on initial examination and whenever there is a significant change in the person's medical status.

(Level of Evidence = V)

Recommendation 1.2

Assess the risk for developing *additional* pressure injuries on initial examination and if there is a significant change in the person's medical status using a valid and reliable pressure injury risk assessment tool.

(Level of Evidence = V)

Recommendation 1.3

Assess the person's pressure injury using the same valid and reliable wound assessment tool on initial examination and whenever there is a significant change in the pressure injury.

(Level of Evidence = V)

Recommendation 1.4

Assess the person's pressure injury for signs and symptoms of infection (superficial critical colonization/localized infection and/or deep and surrounding infection/systemic infection) using a standardized approach on initial examination and at every dressing change.

(Level of Evidence = V)

Recommendation 1.5

- a. Screen all persons with pressure injuries for risk of malnutrition using a valid and reliable screening tool on first examination and if there is a delay in pressure injury healing.
- b. Determine the nutritional status of all persons at risk for malnutrition using a valid and reliable assessment tool within 72 hours of initial examination, and whenever there is a change in health status and/or the pressure injury.
- c. Perform a comprehensive nutrition assessment of all persons with poor nutritional status within 72 hours of initial examination, and if there is a change in health status or delayed healing.

(Level of Evidence = V)

Recommendation 1.6

Assess for pressure injury pain on initial examination and continue to monitor pain at subsequent visits, including prior to and after every wound care intervention, using the same valid and reliable tool consistent with the person's cognitive ability.

(Level of Evidence = V)

Recommendation 1.7

Perform a vascular assessment (i.e., medical history, physical exam) of all persons with pressure injuries in the lower extremities on initial examination.

(Level of Evidence = V)

Recommendation 1.8

Conduct a mobility and support surface assessment on initial examination and whenever there is a significant change in the person's medical condition, weight, equipment, mobility, and/or pressure injury healing.

(Level of Evidence = V)

Planning

Recommendation 2.1

Obtain the referral or consultations required to plan and coordinate a pressure injury plan of care.

(Level of Evidence = V)

Recommendation 2.2

Develop a pressure injury plan of care that incorporates goals mutually agreed upon by the person, the person's circle of care, and the interprofessional team.

(Level of Evidence = Ia)

Implementation

Recommendation 3.1

Reposition the person at regular intervals (i.e., every two to four hours) based on person-centred concerns. While sitting, weight-shift the person every 15 minutes.

(Level of Evidence = V)

Recommendation 3.2

Position all persons with a pressure injury on a pressure redistribution support surface at all times.

(Level of Evidence = V)

Recommendation 3.3

Implement an individualized nutritional plan of care in collaboration with the person and his/her circle of care that addresses nutritional requirements and provides adequate protein, calories, fluid, and appropriate vitamin and mineral supplementation to promote pressure injury healing.

(Level of Evidence = V)

Recommendation 3.4

Provide local pressure injury care consisting of the following, as appropriate:

- Cleansing *(Level of Evidence = V)*
- Moisture balance (healable) or moisture reduction (nonhealable, maintenance) *(Level of Evidence = Ia–b, V)*
- Infection control (i.e., superficial critical colonization/localized infection and/or deep and surrounding infection/systemic infection) *(Level of Evidence Ia–b, V)*
- Debridement *(Level of Evidence = V)*

Recommendation 3.5

Provide electrical stimulation (when available) as an adjunct to best practice wound care in order to speed healing and promote wound closure in stalled but healable stage 2, 3, and 4 pressure injuries.

(Level of Evidence = Ia)

Recommendation 3.6

Implement, as an alternative, the following treatments in order to speed closure of stalled but healable pressure injuries, as appropriate and if available:

- Electromagnetic therapy *(Level of Evidence = Ib)*
- Ultrasound *(Level of Evidence = Ib)*
- Ultraviolet light *(Level of Evidence = Ib)*

Do not consider the following treatment in order to speed closure of stalled but healable pressure injuries:

- Laser therapy *(Not Recommended)*

Recommendation 3.7

Provide negative pressure wound therapy to people with stage 3 and 4 pressure injuries in exceptional circumstances, including enhancement of quality of life and in accordance with other person-/family-centred preferences.

(Level of Evidence = V)

Recommendation 3.8

Collaborate with the person and his/her circle of care to implement a pressure injury self-management plan.

(Level of Evidence = Ia)

Recommendation 3.9

Implement a person-centred pain management plan using pharmacological and non-pharmacological interventions.

(Level of Evidence = V)

Evaluation

Recommendation 4.1

Use the initial risk assessment tool to reassess the person's risk for developing additional pressure injuries on a regular basis and whenever a change in the person's health status occurs.

(Level of Evidence = V)

Recommendation 4.2

Use the initial wound assessment tool to monitor the person's pressure injuries for progress toward person-centred goals on a regular basis and at dressing changes.

(Level of Evidence = V)

Education Recommendations

Education

Recommendation 5.1

Develop and implement comprehensive and sustainable interprofessional pressure injury education programs for clinicians and students entering health-care professions.

(Level of Evidence = V)

Recommendation 5.2

Assess health-care professionals' knowledge, attitudes, and skills related to the assessment and management of existing pressure injuries before and following educational interventions using an appropriate, reliable, and validated assessment tool.

(Level of Evidence = IV, V)

System, Organization, and Policy Recommendations

System, Organization, and Policy

Recommendation 6.1

Organizations must lead and provide the resources to integrate pressure injury management best practices into standard and interprofessional clinical practice, with continuous evaluation of outcomes.

(Level of Evidence = IV)

Recommendation 6.2

Lobby and advocate for investment in pressure injury management as a strategic quality and safety priority in jurisdictions in order to improve health outcomes for people with pressure injuries.

(Level of Evidence = V)

Definitions

Levels of Evidence

Ia Evidence obtained from meta-analysis or systematic reviews of randomized controlled trials, and/or synthesis of multiple studies primarily of quantitative research.

Ib Evidence obtained from at least one randomized controlled trial.

Ila Evidence obtained from at least one well-designed controlled study without randomization.

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study, without randomization.

III Synthesis of multiple studies primarily of qualitative research.

IV Evidence obtained from well-designed non-experimental observational studies, such as analytical studies or descriptive studies, and/or qualitative studies.

V Evidence obtained from expert opinion or committee reports, and/or clinical experiences of respected authorities.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Pressure injuries

Guideline Category

Evaluation

Management

Risk Assessment

Treatment

Clinical Specialty

Dermatology

Family Practice

Geriatrics

Nursing

Physical Medicine and Rehabilitation

Intended Users

Advanced Practice Nurses

Dietitians

Health Care Providers

Nurses

Occupational Therapists

Physical Therapists

Physicians

Guideline Objective(s)

To present evidence-based recommendations that apply to the decisions and best practices of interprofessional teams working to assess and manage existing pressure injuries in people 18 years of age and above

Target Population

People 18 years and above with existing pressure injuries

Interventions and Practices Considered

Evaluation/Risk Assessment

1. Health history, psychosocial history, and physical exam
2. Assessment of risk for developing additional pressure injury using a validated tool
3. Assessment for signs of infection
4. Nutritional assessment and support
5. Assessment of pain related to pressure injury
6. Vascular assessment
7. Mobility and support surface assessment
8. Reassessment on a regular basis

Management

1. Development of a plan of care based on mutually agreed goals
2. Repositioning the patient at regular intervals
3. Use of pressure redistribution support services
4. Individualized nutritional plan of care
5. Local pressure injury care
 - Cleansing
 - Moisture balance or reduction
 - Infection control
 - Debridement
6. Electrical stimulation
7. Adjunctive therapy
 - Electromagnetic therapy
 - Ultrasound
 - Ultraviolet light
8. Negative pressure wound therapy
9. Self-management plan
10. Educational, organizational, and policy approaches and strategies

Note: Laser therapy was considered but not recommended.

Major Outcomes Considered

- Validity of assessment tools
- Incidence and severity of pressure injuries
- Rate of healing

Methodology

Methods Used to Collect/Select the Evidence

METHODS USED TO COLLECT/SELECT THE EVIDENCE

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Guideline Review

The Registered Nurses' Association of Ontario (RNAO) guideline development team's project coordinator searched an established list of Web sites for guidelines and other relevant content published between 2006 and 2014. This list was compiled based on knowledge of evidence-based practice Web sites, recommendations from the literature, and key Web sites related to pressure ulcers/injuries. Furthermore, expert panel members were asked to provide guidelines from their own personal libraries. The full search strategy is available at the [RNAO Web site](#)

Systematic Review

A comprehensive search strategy was developed by RNAO's research team and a health sciences librarian, based on inclusion and exclusion criteria created with the RNAO expert panel. A search for relevant articles published in English between January 2006 and October 2014 was applied to the following databases: Cumulative Index to Nursing and Allied Health (CINAHL), Cochrane Central Register of Controlled Trials (CENTRAL), Cochrane Database of Systematic Reviews (CDSR), EMBASE, Educational Resources Information Center (ERIC), MEDLINE, MEDLINE in Process, and PsycINFO. In addition to this systematic search, panel members were asked to review personal libraries for key articles not found through the above search strategies.

Detailed information about the search strategy for the systematic review, including the inclusion and exclusion criteria as well as search terms, is available in the guideline search strategy document (see the "Availability of Companion Documents" field).

Once articles were retrieved, two RNAO Best Practice Guideline (BPG) nursing research associates (nurses holding master's degrees) independently assessed the eligibility of the studies according to established inclusion/exclusion criteria. The RNAO's BPG program manager, involved in supporting the RNAO expert panel, resolved disagreements.

Prior to publication, the systematic review was updated, and a search for relevant articles published in English between October 2014 and December 31, 2015 was applied to the following databases: Medline, CINAHL, CENTRAL, and CDSR. The purpose of this systematic review update was to capture any relevant research that would prompt an update to the current recommendations. A total of 2,042 research articles were retrieved, and one RNAO BPG nursing research associate assessed the eligibility of the studies according to established inclusion/exclusion criteria. Any uncertainties were resolved by the RNAO's Best Practice Guideline program manager. In total, six research articles were included in the systematic review update.

Hand Search

RNAO expert panel members were asked to review personal libraries to identify key articles not found through the above search strategies. Articles identified by RNAO expert panel members were included in search results if two nursing research associates independently determined that the articles had not been identified by the systematic review search and met the inclusion criteria.

Number of Source Documents

Eight guidelines and 80 studies were included. See the flow diagrams in Appendix C in the original guideline document for more information on the review process.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Levels of Evidence

Ia Evidence obtained from meta-analysis or systematic reviews of randomized controlled trials, and/or synthesis of multiple studies primarily of quantitative research.

Ib Evidence obtained from at least one randomized controlled trial.

IIa Evidence obtained from at least one well-designed controlled study without randomization.

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study, without randomization.

III Synthesis of multiple studies primarily of qualitative research.

IV Evidence obtained from well-designed non-experimental observational studies, such as analytical studies or descriptive studies, and/or qualitative studies.

V Evidence obtained from expert opinion or committee reports, and/or clinical experiences of respected authorities.

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Guideline Review

Two of the Registered Nurses' Association of Ontario's (RNAO) Best Practice Guideline (BPG) nursing research associates and a BPG program manager critically appraised 16 international guidelines using the *Appraisal of Guidelines for Research and Evaluation Instrument 2* (Brouwers et al., 2010).

Systematic Review

Quality appraisal scores for 16 articles (a random sample of 10 percent of articles eligible for data extraction and quality appraisal) were independently assessed by RNAO BPG research associates. Acceptable inter-rater agreement (kappa statistic, $K=0.706$) justified proceeding with quality appraisal and data extraction by dividing the remaining studies equally between the two research associates. A final summary of literature findings was completed. The comprehensive data tables and summary were provided to all expert panel members for review and discussion.

A review of the most recent literature and relevant guidelines published between January 2006 and October 2014 resulted in an update of the existing recommendations as well as the inclusion of new recommendations.

A complete bibliography of all full text articles screened for inclusion is available (see the "Availability of Companion Documents" field).

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Guideline Development Process

For this revised guideline, Registered Nurses' Association of Ontario (RNAO) assembled a panel of experts who represent a range of sectors and practice areas (see the "Composition of the Group That Authored the Guideline" field). A systematic review of the evidence was based on the

purpose and scope of the original guideline, Assessment and Management of Stage I to IV Pressure Ulcers (RNAO, 2007), and was supported by four clinical questions. The systematic review captured relevant literature and guidelines published between January 2006 and October 2014. The following research questions were established to guide the systematic review:

1. What are the most effective methods for the assessment of existing pressure ulcers/injuries in clients?
2. What are the most effective interventions to manage existing pressure ulcers/injuries in clients?
3. What education and training is required to ensure the provision of effective pressure ulcer/injury assessment and management among practicing health care professionals?
4. How do health-care organizations and the broader health-care system support and promote the optimal assessment and management of existing pressure ulcers/injuries in clients?

The expert panel's mandate was to review the original guideline in light of the new evidence to ensure the continuing validity, appropriateness, and safety of the recommendations. This new revised guideline is the result of the expert panel's work to integrate the most current and best evidence into the recommendations with the supporting evidence from the original guideline (where applicable).

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Stakeholder reviewers for Registered Nurses' Association of Ontario (RNAO) Best Practice Guideline (BPGs) are identified in two ways. First, stakeholders are recruited through a public call issued on the RNAO Web site (<http://RNAO.ca/bpg/get-involved/stakeholder>). Second, key individuals and organizations with expertise in the Guideline topic area are identified by the RNAO guideline development team and expert panel, and are invited to participate in the review.

Reviewers are asked to read a full draft of the Guideline and participate in the review prior to its publication. Stakeholder feedback is submitted by completing an online survey questionnaire. Stakeholders are asked to answer the following questions with regard to each recommendation:

- Is this recommendation clear?
- Do you agree with this recommendation?
- Does the evidence support this recommendation?
- Does this recommendation apply to all roles, regions, and practice settings?

The survey also includes an opportunity for stakeholders to include comments and feedback related to each section of the guideline.

The RNAO guideline development team compiles the survey submissions and prepares a summary of the feedback received. The RNAO expert panel reviews and considers all feedback and, if necessary, modifies the guideline content and recommendations prior to publication, in order to address the feedback received.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- According to a systematic review, therapeutic relationships instill hope in people with pressure injuries, improve their adherence to treatment, and ultimately contribute to positive health outcomes.
- In several studies, a specialized diet resulted in improved wound healing (e.g., reduction in pressure injury size and higher rates of healing), decreased wound care requirements, and improved tissue viability in some people with stage 2, 3, and 4 pressure injuries.
- A retrospective study conducted on 85 patients with deep tissue pressure injuries (DTPIs) found a significant improvement in wound severity scores when non-contact ultrasound was delivered via a fine mist to the suspected DTPIs.
- Adequate pain control improves all aspects of a person's quality of life, including mood (e.g., stress, anxiety, anger), sleep, cognition, ability to cope, and ability to perform the activities of daily living.
- Electrical stimulation speeds up healing and promotes wound closure in stalled but healable stage 2, 3, and 4 pressure injuries.

Potential Harms

- Hydrogen peroxide can harm healthy granulation tissue and may form air emboli if packed in deep sinuses.
- Mercuric chloride, crystal violet, and Proflavine may be mutagens and can have systemic toxicity.
- Cetrimide (quaternary ammonium) poses the risk of high toxicity to tissue.
- Povidone iodine is toxic with prolonged use or over large areas.
- The National Pressure Ulcer Advisory Panel (NPUAP), European Pressure Ulcer Advisory Panel (EPUAP), & Pan-Pacific Pressure Injury Alliance (PPPIA) and Australian Wound Management Association (AWMA) guideline groups do not recommend that silver dressings be used for a prolonged period of time, because of the potential for tissue toxicity and the risk of bacterial resistance. Thus, silver dressings should be discontinued once superficial critical colonization is no longer a clinical concern, as demonstrated by decreased exudates, decreased odour, improved wound measurements, and improvement in the peri-wound.
- Electrical stimulation (ES) treatment may result in minor skin irritation under the electrode, which usually resolves spontaneously within 24 to 72 hours.

See Appendices R and T in the original guideline document for additional information on potential harms of cleansing agents and topical antimicrobial and antiseptic agents.

Contraindications

Contraindications

- Electromagnetic therapy (EMT) is contraindicated in people with electrical device implants (e.g., pacemakers), people who have undergone an organ transplant, and women who are pregnant. Other contraindications to pulsed electromagnetic field (PEMF) use include active bleeding, active deep vein thrombosis, and suspected or confirmed cancer.
- The use of ultrasound (US) as an adjunctive therapy for the treatment of pressure injuries is contraindicated in people with uncontrolled bleeding tissue, untreated hemorrhagic disorders, areas of suspected or known malignancy, active deep vein thrombosis (DVT) causing clot, recently radiated tissues or ectopic bone formation (e.g., myositis ossificans), and tissues with encapsulated or virulent infection (e.g., tuberculosis).
- Repositioning may be medically contraindicated due to fractures or an unstable spine.
- It is important to note that autolytic debridement should not be used when a wound infection has not been treated or for large pressure injuries (where necrotic tissue exceeds 50 percent).
- Electrical stimulation (ES) should not be used in people with certain medical conditions, including osteomyelitis or local cancer, or in people with implanted electronic devices or who have a blood clot in their leg. ES should also not be applied over the pregnant uterus, wound

dressings containing metallic or ionic components, or certain body locations containing excitable tissue (e.g., perineum, anterior neck).

Qualifying Statements

Qualifying Statements

- These guidelines are not binding on nurses, other health care professionals, or the organizations that employ them. The use of these guidelines should be flexible, and based on individual needs and local circumstances. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor the Registered Nurses' Association of Ontario (RNAO) gives any guarantee as to the accuracy of the information contained in them or accepts any liability with respect to loss, damage, injury, or expense arising from any such errors or omissions in the contents of this work.
- This interprofessional Best Practice Guideline (BPG) is a comprehensive document that provides resources for evidence-based interprofessional practice. It is not intended to be a manual or "how to" guide, but rather a tool to guide best practices and enhance decision making for interprofessional teams working with people with existing pressure injuries. The guideline should be reviewed and applied in accordance with both the needs of the individual organizations or practice settings, and the needs and preferences of the person with a pressure injury. In addition, the guideline provides an overview of appropriate structures and supports for providing the best possible evidence-based care.

Implementation of the Guideline

Description of Implementation Strategy

Implementation Strategies

Implementing guidelines at the point of care is multi-faceted and challenging; it takes more than awareness and distribution of guidelines to get people to change how they practice. Guidelines must be adapted for each practice setting in a systematic and participatory way, to ensure recommendations fit the local context. The Registered Nurses' Association of Ontario (RNAO) *Toolkit: Implementation of Best Practice Guidelines* (2nd ed.; 2012) provides an evidence-informed process for doing this (see Appendix Y in the original guideline document).

The *Toolkit* is based on emerging evidence that successful uptake of best practice in health care is more likely when:

- Leaders at all levels are committed to supporting guideline implementation
- Guidelines are selected for implementation through a systematic, participatory process
- Stakeholders for whom the guidelines are relevant are identified and engaged in the implementation
- Environmental readiness for implementing guidelines is assessed
- The guideline is tailored to the local context
- Barriers and facilitators to using the guideline are assessed and addressed
- Interventions to promote use of the guideline are selected
- Use of the guideline is systematically monitored and sustained
- Evaluation of the guideline's impact is embedded in the process
- There are adequate resources to complete all aspects of the implementation

The *Toolkit* uses the "Knowledge-to-Action" framework to demonstrate the process steps required for knowledge inquiry and synthesis. It also guides the adaptation of the new knowledge to the local context and implementation. This framework suggests identifying and using knowledge tools, such as guidelines, to identify gaps and to begin the process of tailoring the new knowledge to local settings.

RNAO is committed to widespread deployment and implementation of the Best Practice Guidelines (BPGs). The RNAO uses a coordinated approach to dissemination, incorporating a variety of strategies, including: (1) the Nursing Best Practice Champion Network®, which develops the capacity of individual nurses to foster awareness, engagement, and adoption of BPGs; (2) nursing order sets, which provide clear, concise, actionable intervention statements derived from the BPGs' practice recommendations that can be readily embedded within electronic medical records or used in paper-based or hybrid environments; and (3) the Best Practice Spotlight Organization® (BPSO®) designation, which supports implementation at the organization and system levels. BPSOs® focus on developing evidence-based cultures with the specific mandate to

implement, evaluate, and sustain multiple RNAO BPGs. In addition, the RNAO offers capacity-building learning institutes on specific BPGs and their implementation annually.

Information about RNAO implementation strategies can be found at:

- RNAO Best Practice Champions Network®: <http://mao.ca/bpg/get-involved/champions>
- RNAO Nursing Order Sets: <http://mao.ca/chealth/nursingordersets>
- RNAO Best Practice Spotlight Organizations®: <http://mao.ca/bpg/bpso>
- RNAO capacity-building learning institutes and other professional development opportunities: <http://mao.ca/events>

Implementation Tools

Audit Criteria/Indicators

Chart Documentation/Checklists/Forms

Mobile Device Resources

Patient Resources

Resources

Slide Presentation

Staff Training/Competency Material

Tool Kits

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Safety

Identifying Information and Availability

Bibliographic Source(s)

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2016 May

Guideline Developer(s)

Registered Nurses' Association of Ontario - Professional Association

Source(s) of Funding

Funding was provided by the Ontario Ministry of Health and Long Term Care.

Guideline Committee

Registered Nurses' Association of Ontario Expert Panel

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Declarations of interest that might be construed as constituting an actual, potential, or apparent conflict were made by all members of the Registered Nurses' Association of Ontario (RNAO) expert panel, and members were asked to update their disclosures regularly throughout the Guideline development process. Information was requested about financial, intellectual, personal, and other interests, and was documented for future reference. No limiting conflicts were identified.

Further details are available from the Registered Nurses' Association of Ontario.

Guideline Endorser(s)

Canadian Association for Enterostomal Therapy - Professional Association

Canadian Association of Wound Care - Nonprofit Organization

Canadian Patient Safety Institute - Nonprofit Organization

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Registered Nurses' Association of Ontario (RNAO). Assessment & management of stage I to IV pressure ulcers. Toronto (ON): Registered Nurses' Association of Ontario (RNAO); 2007 Mar. 112 p. [118 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#) .

Availability of Companion Documents

The following are available:

- Registered Nurses' Association of Ontario – Nursing Best Practice Guidelines Program: assessment and management of pressure injuries for the interprofessional team, third edition. Systematic review search strategy. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2016. 4 p. Available from the [Registered Nurses' Association of Ontario \(RNAO\) Web site](#) .
- Registered Nurses' Association of Ontario – Nursing Best Practice Guidelines Program: assessment and management of pressure injuries for the interprofessional team, third edition. Bibliography. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2016. 10 p. Available from the [RNAO Web site](#) .
- Positioning techniques in long-term care: self-directed learning package for health care providers. Toronto (ON): Registered Nurses Association of Ontario (RNAO). Available from the [RNAO Web site](#) .
- Assessment and management of pressure ulcers – Education program. Toronto (ON): Registered Nurses Association of Ontario (RNAO). Available from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#) .
- RNAO assessment and management of pressure injuries for the interprofessional team, third edition. Recommendation comparison chart. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2016 Aug. 11 p. Available from the [RNAO Web site](#) .
- Assessment and management of pressure injuries for the interprofessional team. Third edition. Slide set. Toronto (ON): Registered Nurses' Association of Ontario (RNAO); 2016 Oct. 36 p. Available from the [RNAO Web site](#) .
- Toolkit: implementation of best practice guidelines. Second edition. Toronto (ON): Registered Nurses' Association of Ontario (RNAO); 2012 Sep. 154 p. Available from the [RNAO Web site](#) .

In addition, a variety of implementation tools, including the pressure injury staging system by the National Pressure Ulcer Advisory Panel, a sample medical history template, pressure injury assessment tools, nutrition screening and assessment tools, seating assessment, and self-management

techniques, are available in the original guideline document. Structure, process and outcome indicators for monitoring and evaluating the guideline are available in Table 6 in the original guideline document.

Mobile versions of RNAO guidelines are available from the [RNAO Web site](#) .

Patient Resources

The following is available:

- Taking the pressure off: preventing and managing pressure injuries. Health education fact sheet. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2016. 2 p. Available in from the [RNAO Web site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI on December 17, 2003. The information was verified by the guideline developer on January 16, 2004. This summary was updated by ECRI Institute on September 28, 2007. The updated information was verified by the guideline developer on October 17, 2007. This summary was updated by ECRI Institute on March 16, 2011 following the U.S. Food and Drug Administration advisory on negative pressure wound therapy (NPWT) systems. This summary was updated by ECRI Institute on October 17, 2016. The updated information was verified by the guideline developer on October 24, 2016.

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